SALTON SEA HYDROLOGIC FOCUSED TECHNICAL GROUP MEETING NOTES

January 31, 2008 10:00 – 4:00 University of California, Riverside - Palm Desert Graduate Center Palm Desert, CA

Welcome and Introductions

Jerry Boles (DWR) welcomed the attendees and led introductions of those present.

Meeting Purpose

The purpose of the meeting was to review the hydrologic problem statement, goal, objectives, constraints and assumptions, and a conceptual model, all of which will become elements of the Monitoring and Assessment Program (MAP) that is being developed.

Problem Statement, Goals, Objectives

David Christophel (CH2M HILL) introduced the discussion of the Data Quality Objectives (DQO) process and how the development of the MAP will roughly follow this guidance. He explained that this process is being used as a tool to provide consistency among the various resource areas (biological, hydrological, air quality, socio-economics, and engineering/geology/geography) in the development of the monitoring program.

Input received from meeting participants included suggestions to:

- More clearly define what is included in the hydrologic component of the MAP;
- Re-categorize the draft objectives as "processes" and use more general objective statements such as "understand hydrologic processes" and "develop benchmarks"; and
- Recognize that water management could change water quality almost overnight.

Constraints and Assumptions

The group reviewed and discussed a draft set of constraints and assumptions prepared by the Biological Focused Technical Group. These constraints and assumptions largely reflected decisions or direction provided in the Program EIR that would help focus monitoring and study needs. Based on this discussion, the group recommended several revisions.

Conceptual Model

Jerry Boles presented a draft conceptual model depicting hydrology and water quality elements of the Salton Sea ecosystem to the group for discussion. The following is a summary list of the comments and suggestions offered by group participants. A revised model will be prepared and distributed prior to the next meeting.

In general, all boxes should represent measurable parameters (state variables), while arrows should represent processes.

A linkage between invertebrates and phytoplankton should be included.

The role of wind and current in circulation, resuspension, organic cycling, turbidity, and deposition of selenium and phosphorus should be considered.

Solar inputs and their role in temperature and evapotranspiration should be depicted.

Both benthic and aquatic invertebrates should be shown.

Replace the term "shading" with the word "light."

Deposition and erosion should be shown.

Hydrodynamics should be depicted.

Bioaccumulation could be described as a process.

Invertebrate and fish dependencies should be reviewed to confirm that they accurately describe the system.

Depth and elevation should be shown.

As part of this discussion, the group agreed that the frequency of data collection should support long-term monitoring as well as measurement of catastrophic and episodic events. They also indicated that a matrix showing the level of uncertainty for each process described in the conceptual model would be useful. This would inform the selection of appropriate spatial and temporal scales for the monitoring.

Key Questions

The group participated in the identification and discussion of key questions related to hydrology and water quality at the Salton Sea that should be addressed through a monitoring program. These questions focus on information that would be necessary over the short term to document conditions and trends at the Salton Sea and to design and create habitat. A revised/refined version of the key questions will be prepared and distributed prior to the next meeting.